

covering the master substrate with a layer of photosensitive material;  
recording a surface relief pattern having master lands and master grooves in the data storage disk master, including the steps of exposing and developing the photosensitive material; and

controlling the exposing and developing of a specified thickness of photosensitive material to form master grooves extending down to a substrate interface between the master substrate and the layer of photosensitive material, such that the width of the master grooves at the substrate interface corresponds to a desired width of the replica lands, including the step of exposing the photosensitive material to obtain a wide, flat master groove bottom defined by the master substrate, relative to a master land top.

28. (NEW) A method of making a disk master for use in making a replica disk in an inverse stamping process, the replica disk being capable of storing high volumes of information, the replica disk including a surface relief pattern with replica lands and replica grooves, the surface relief pattern having an orientation which is inverse of the disk master, the method comprising the steps of:

providing a master substrate;

coating at least a portion of the master substrate with a layer of photosensitive material to form the disk master;

recording a surface relief pattern having master lands and master grooves in the master disk, including the steps of using a laser beam recorder for exposing the photosensitive material in a desired track pattern having a track pitch, and developing the photosensitive material; and

controlling the exposing and developing of the photosensitive material for forming master grooves extending down to a substrate interface between the master substrate and the photosensitive material, such that the width of the master grooves at the substrate interface corresponds to a desired width of the replica lands, including the step of exposing the photosensitive material to obtain a wide, flat master groove bottom having

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a width greater than 100 nanometers defined by the master substrate,  
relative to a master lands top.

Respectfully submitted,

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